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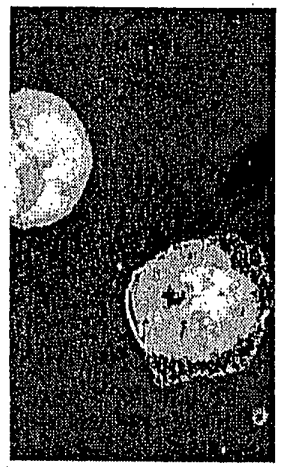
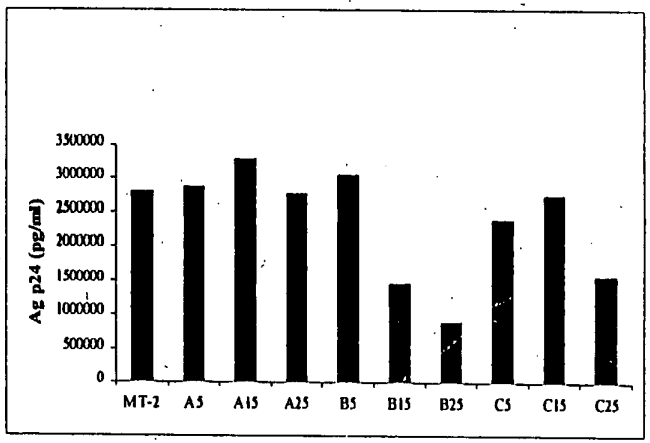
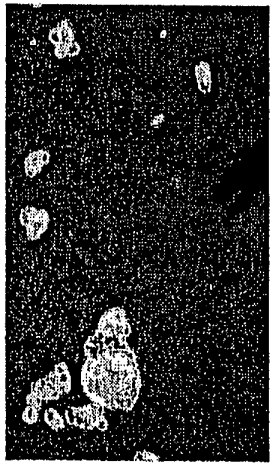


MT-2

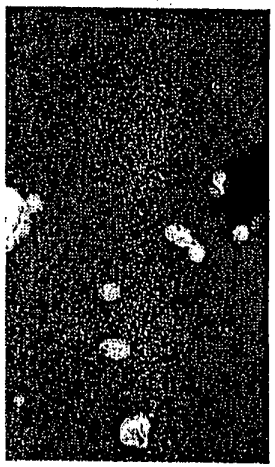


C 25 mM

B 5 mM



B 15 mM



B 25 mM

Figure 1. Effect of selected oligosaccharides on HIV-1 T-tropic strain replication in MT-2 cells as evidenced by syncytia formation and Ag p24 release (insert). B= globotriose; C=lactose.

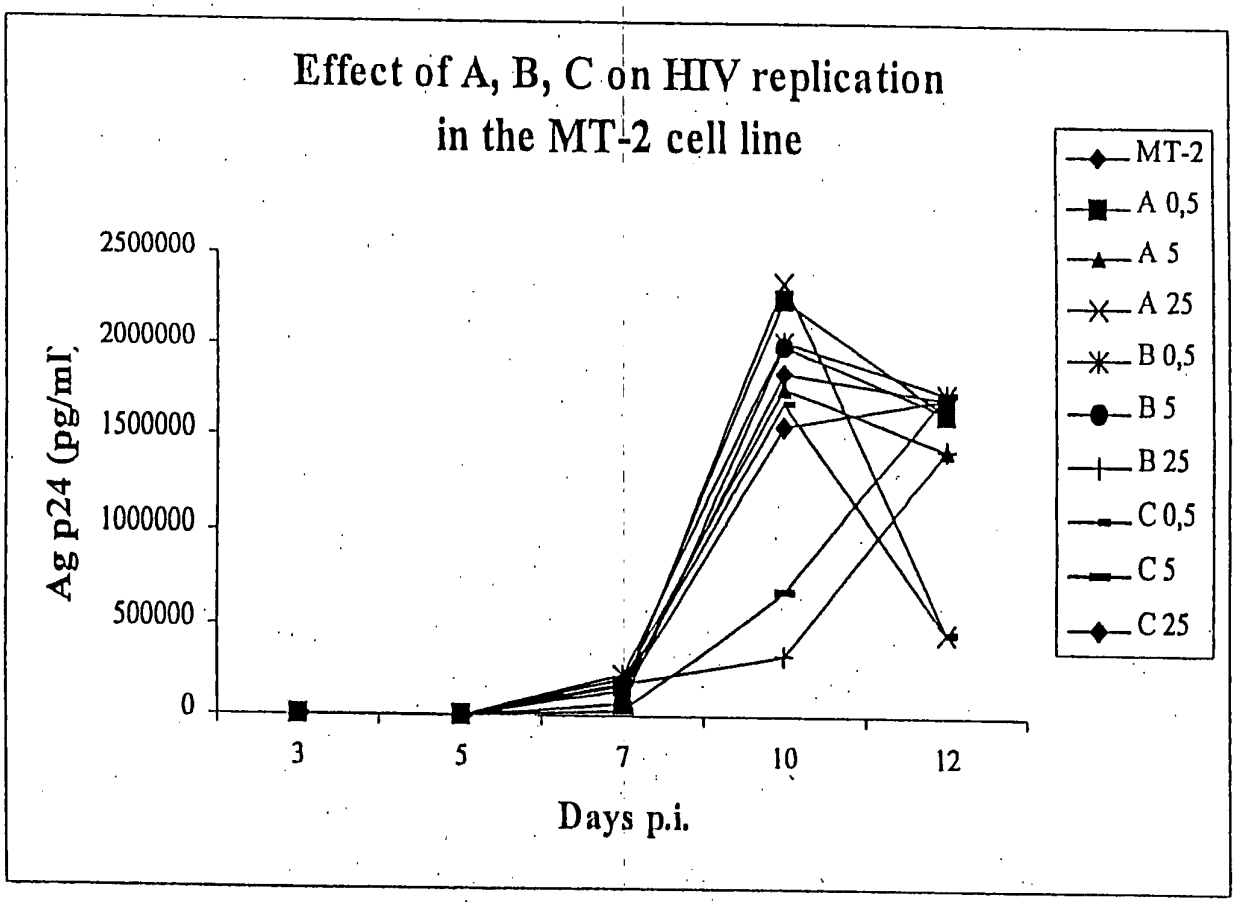
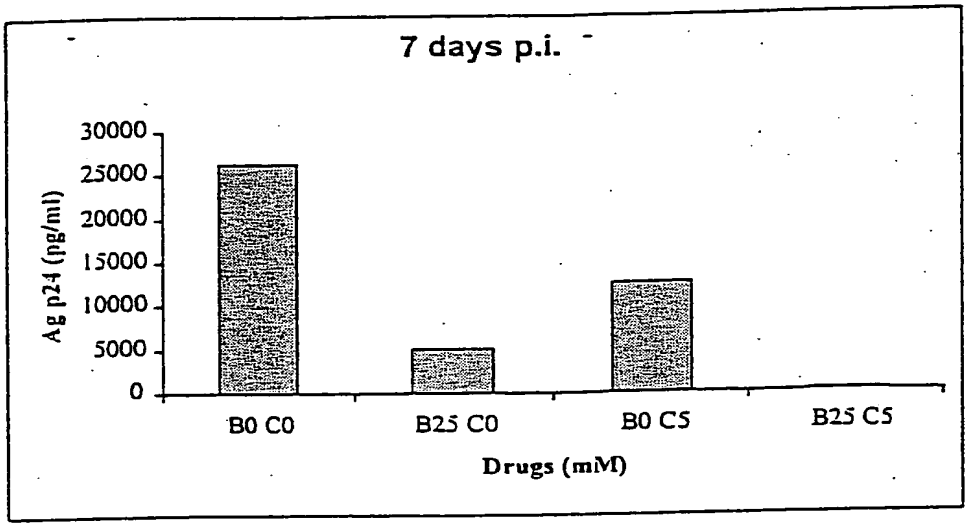
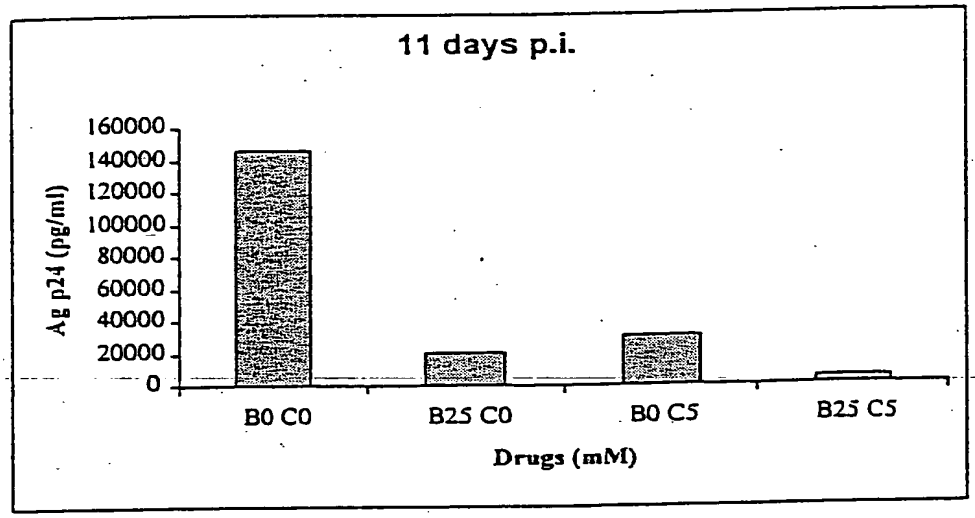


Figure 2. Efect of selected oligosaccharides on HIV-1 replication in MT-2 cell line at days 3 through 12 post-infection. A=lacto-N-tetraose; B= globotriose; C=lactose.





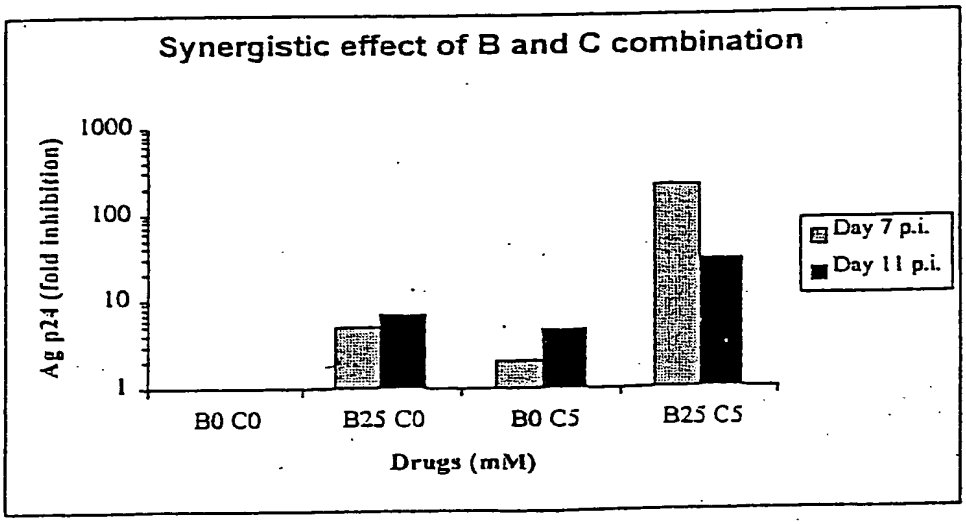
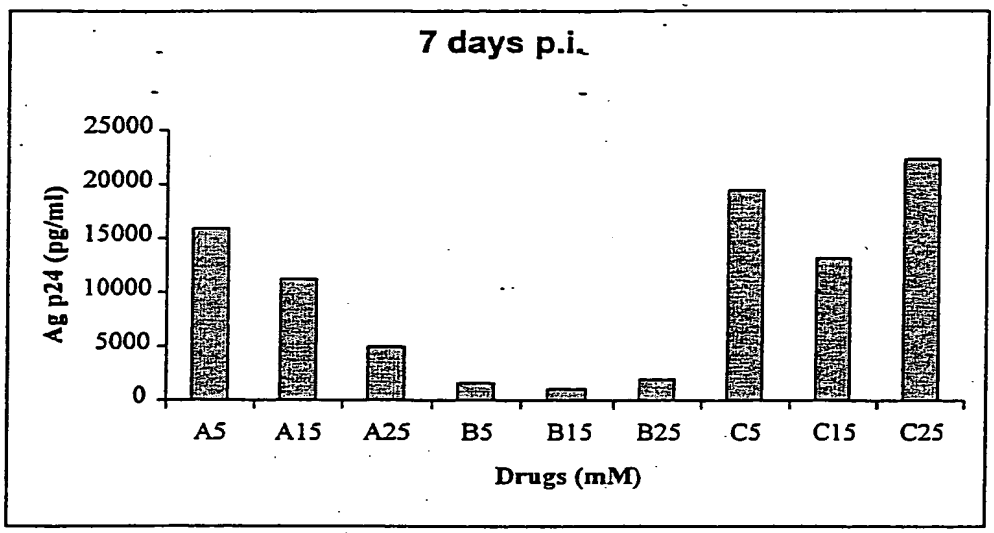


Figure 3. Synergistic effect of globotriose (B) and lactose (C) on HIV-1 replication in MT-2 cell line. Numbers after the initials represent concentration in mM.



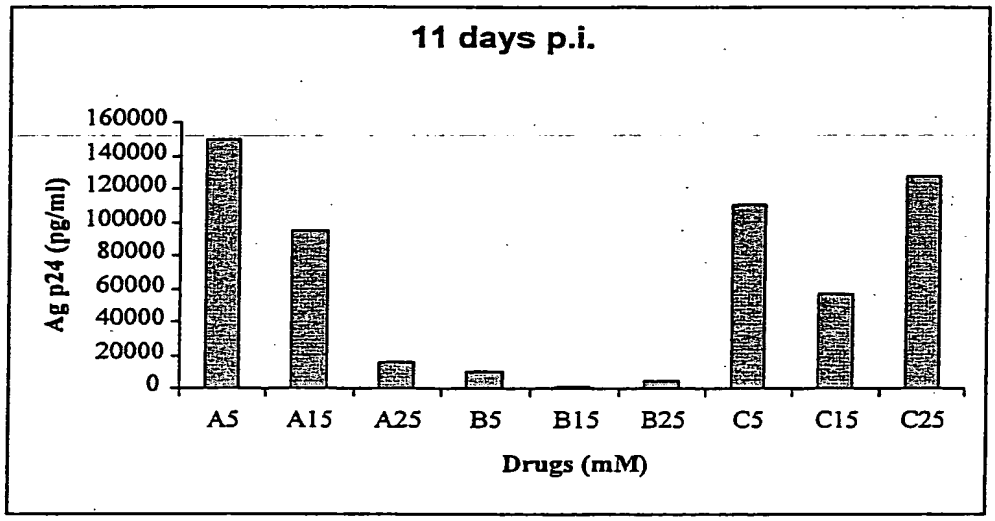


Figure 4. Effect of selected oligosaccharides on the replication of clinical isolate 1936 in MT-2 cells. A=lacto-N-tetraose; B= globotriose; C=lactose. Numbers after the initials represent concentration in mM.

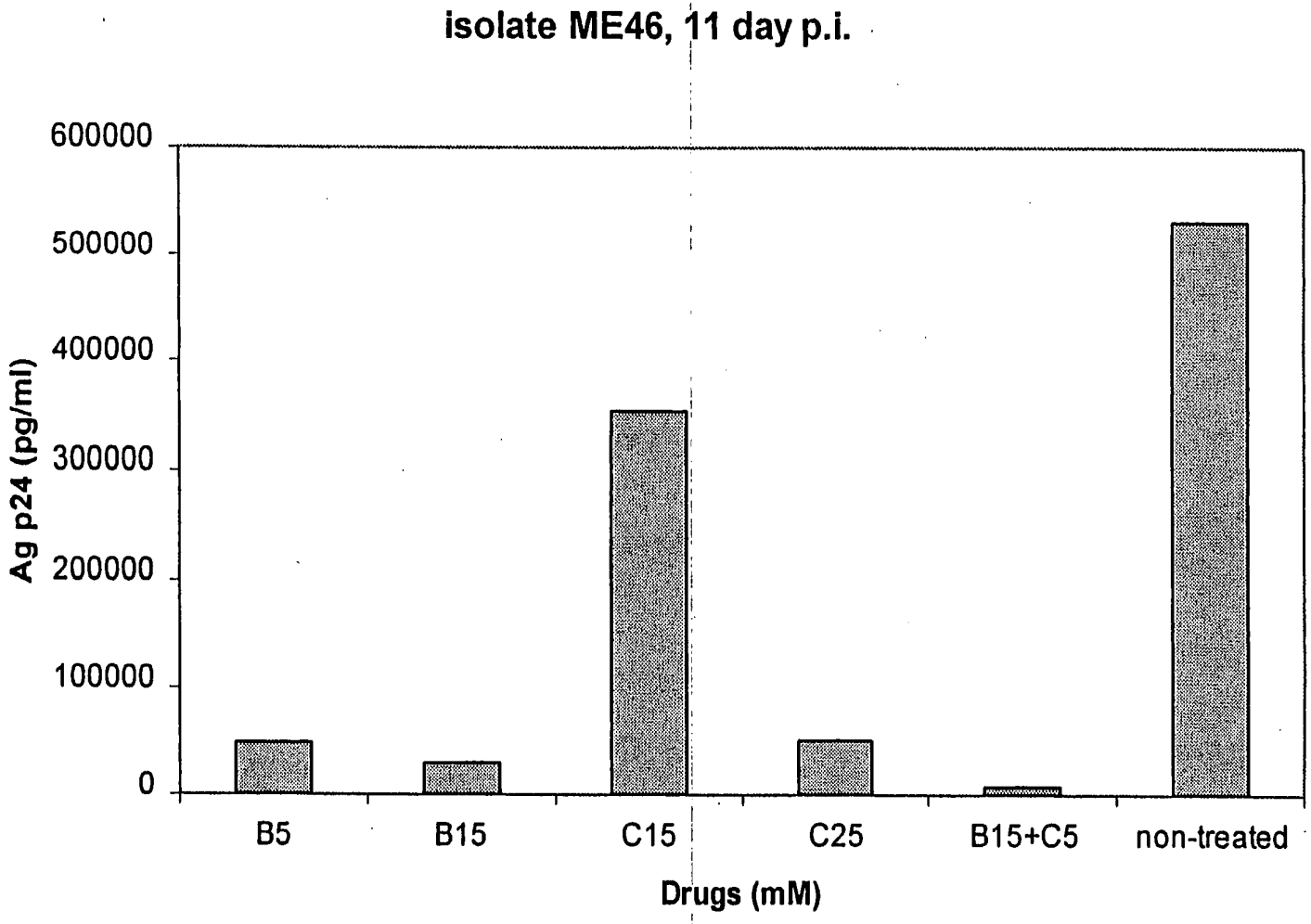


Figure 5. Effect of selected oligosaccharides on the replication of clinical isolate ME46 in MT-2 cells. B= globotriose; C=lactose. Numbers after the initials represent concentration in mM.

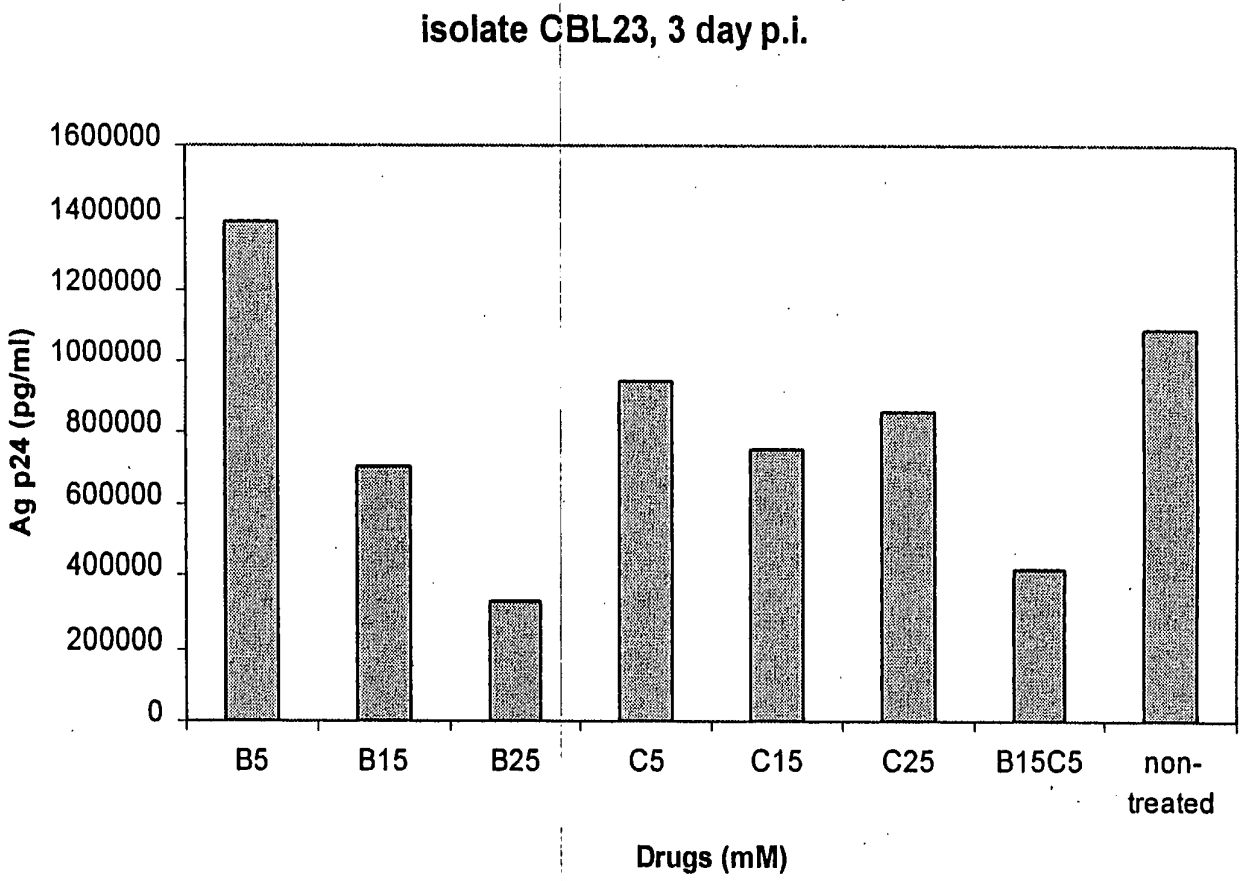
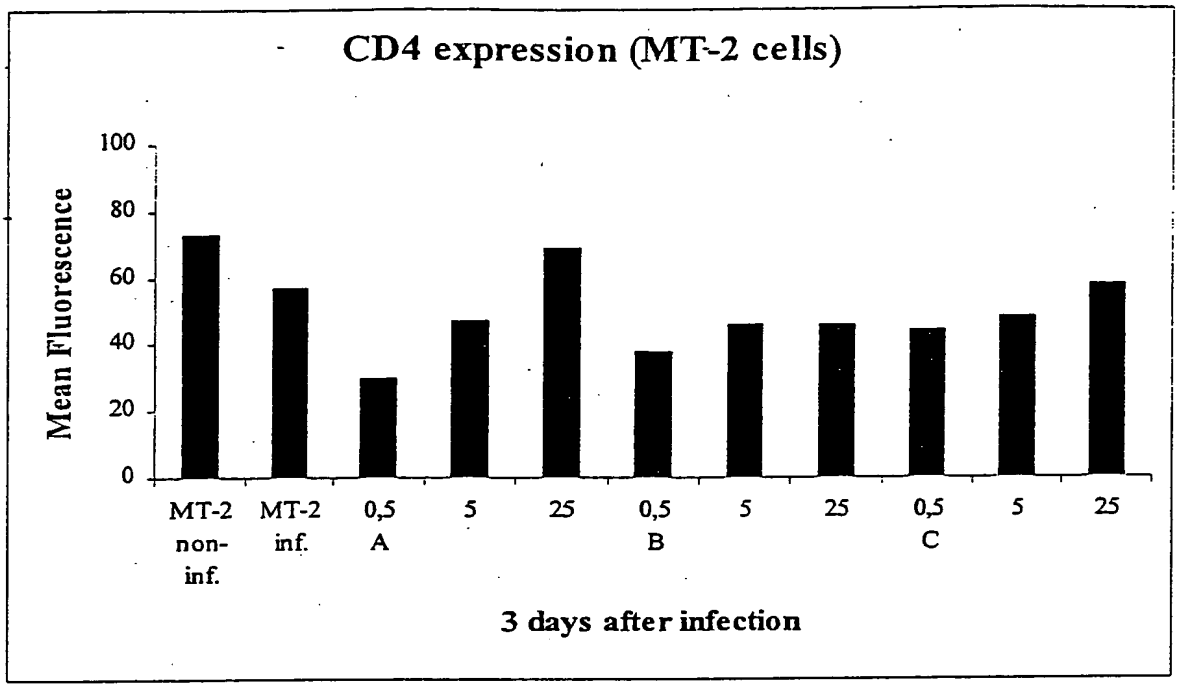


Figure 6. Effect of selected oligosaccharides on the replication of clinical isolate CBL23 (HIV-2) in MT-2 cells. B= globotriose; C=lactose. Numbers after the initials represent concentration in mM.



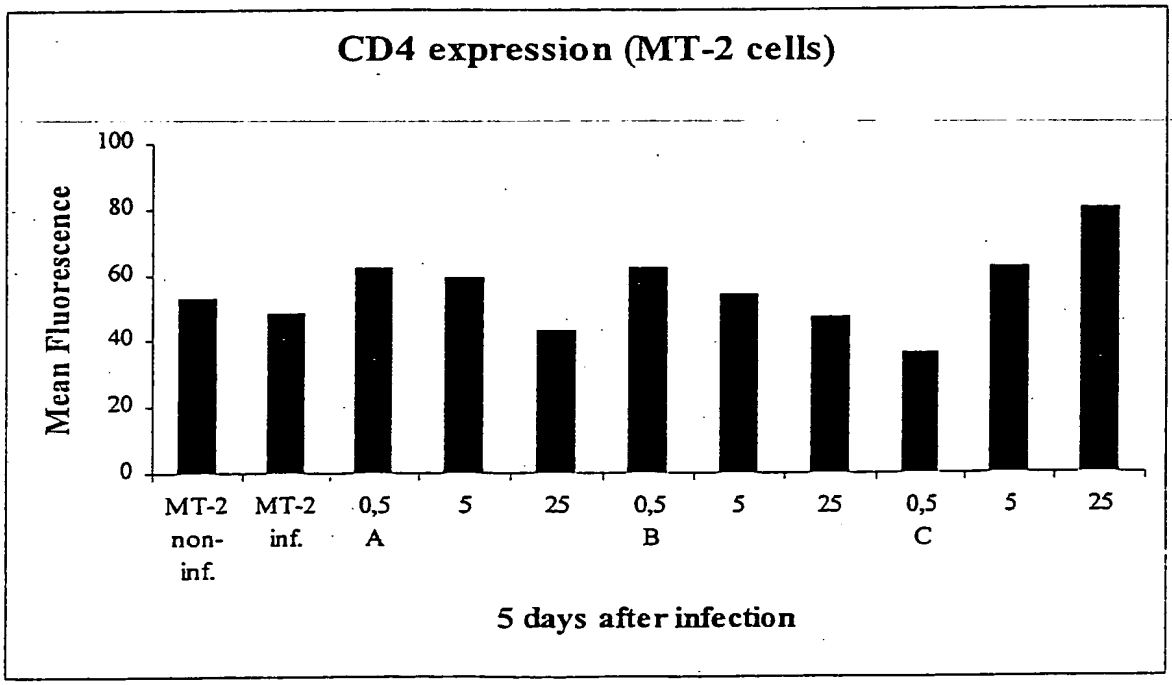


Figure 7. Effect of selected oligosaccharides on CD4 expression in MT-2 cells, 3 and 5 day s post-infection with isolate NL4.3. A=lacto-N-tetraose; B= globotriose; C=lactose. Numbers after the initials represent concentration in mM.

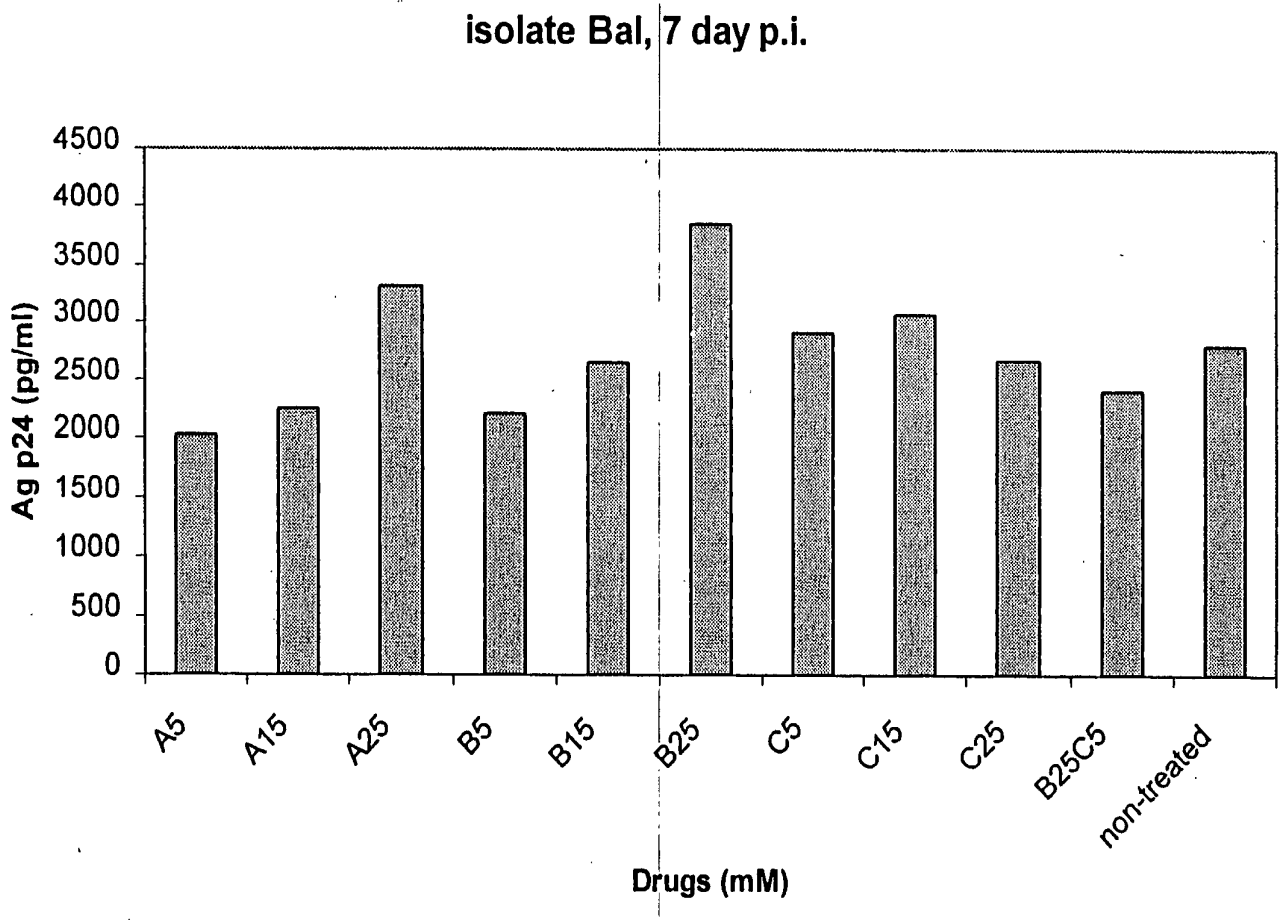
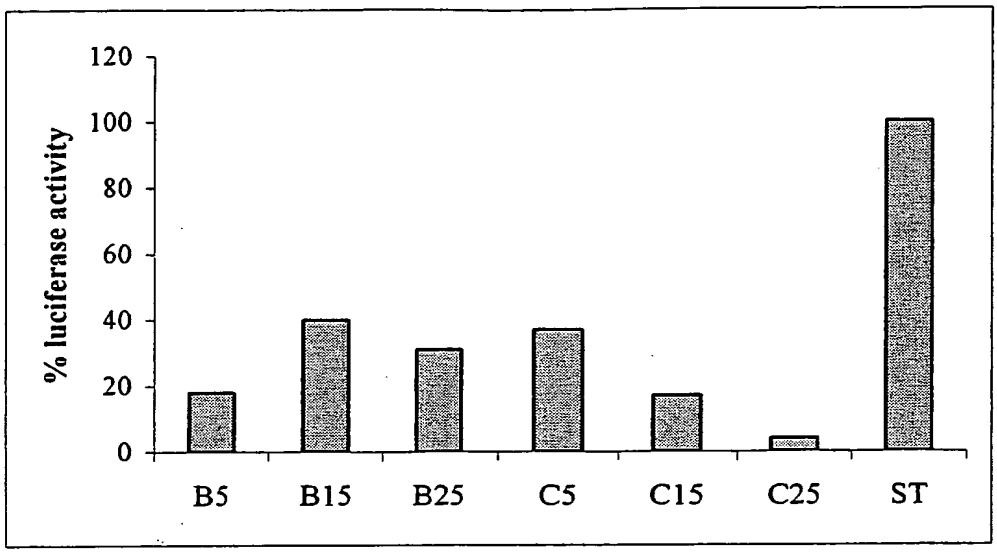
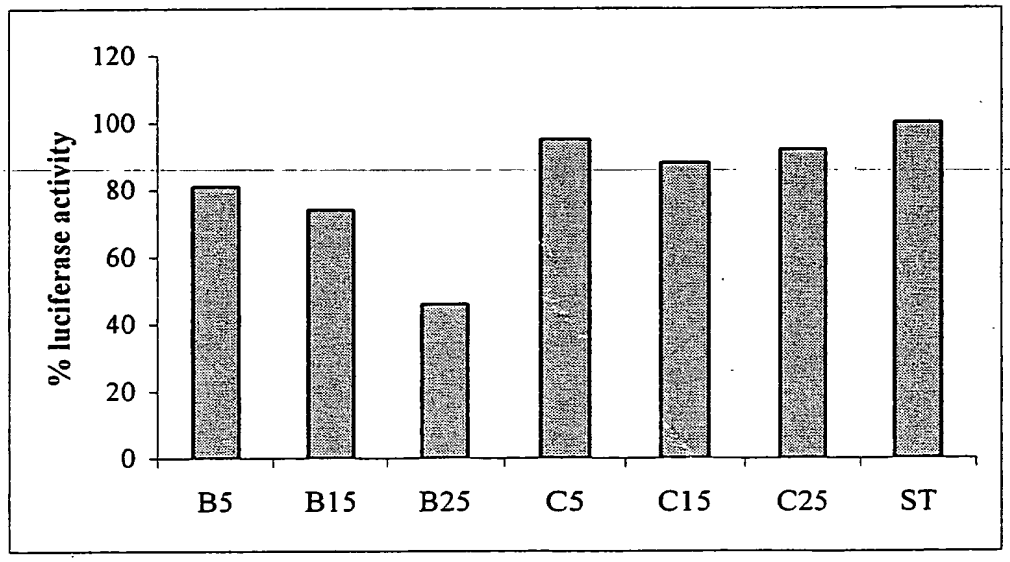


Figure 8. Effect of selected oligosaccharides on the replication of HIV-1 M-tropic strain Ba-L in MT-2 cells. A=lacto-N-tetraose; B= globotriose; C=lactose. Numbers after the initials represent concentration in mM.

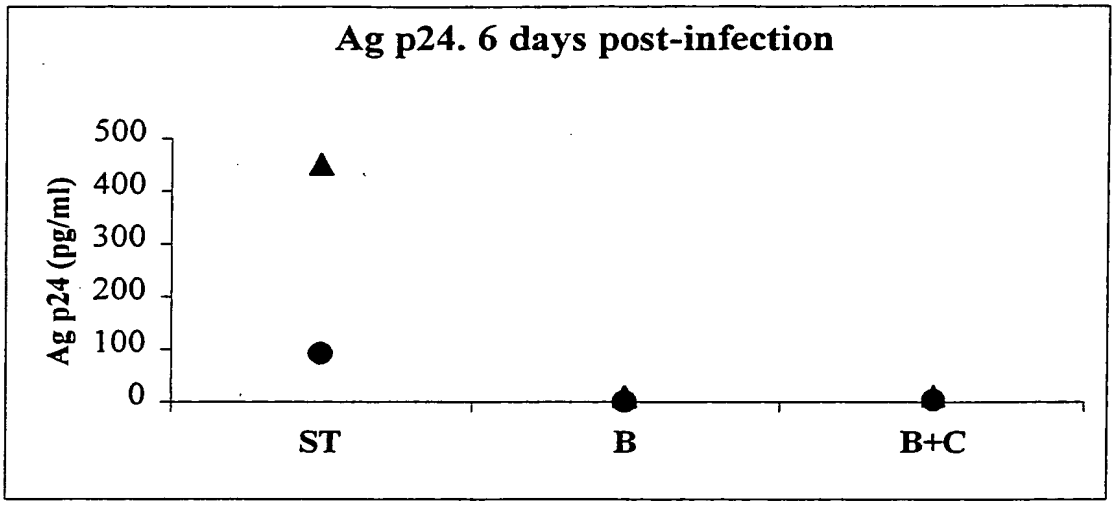


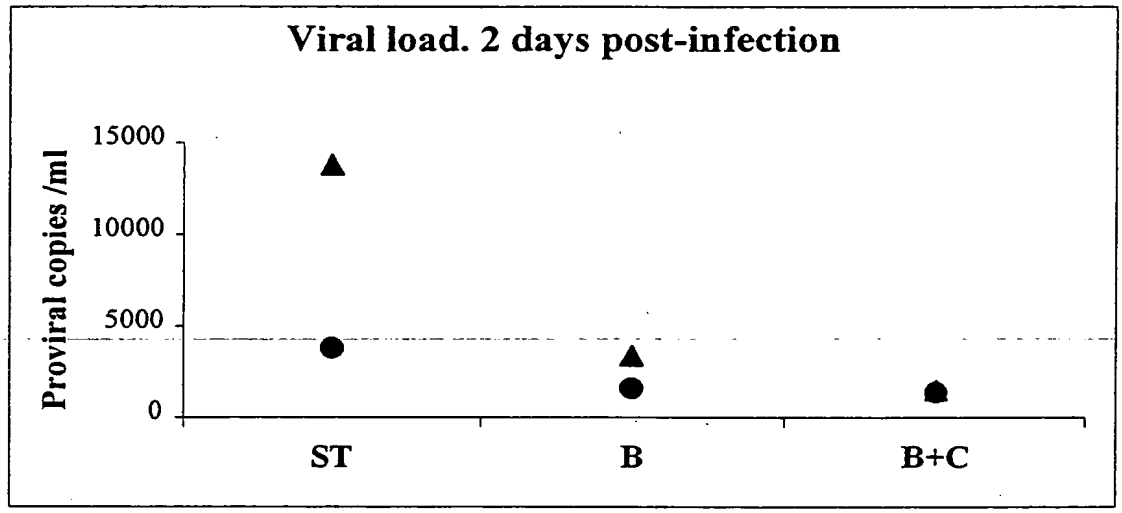
HIV envelope



VSV envelope

Figure 9. Effect of selected oligosaccharides on the entrance of HIV-1 isolate pNL4.3luc in MT-2 cells. Upper panel: pNL4.3luc virus pseudotyped with T-tropic envolope of HXB2 (HIV). Lower panel: pNL4.3luc virus pseudotyped with protein G of vescicular stomatitis virs (VSV). B= globotriose; C=lactose. Numbers after the initials represent concentration in mM.





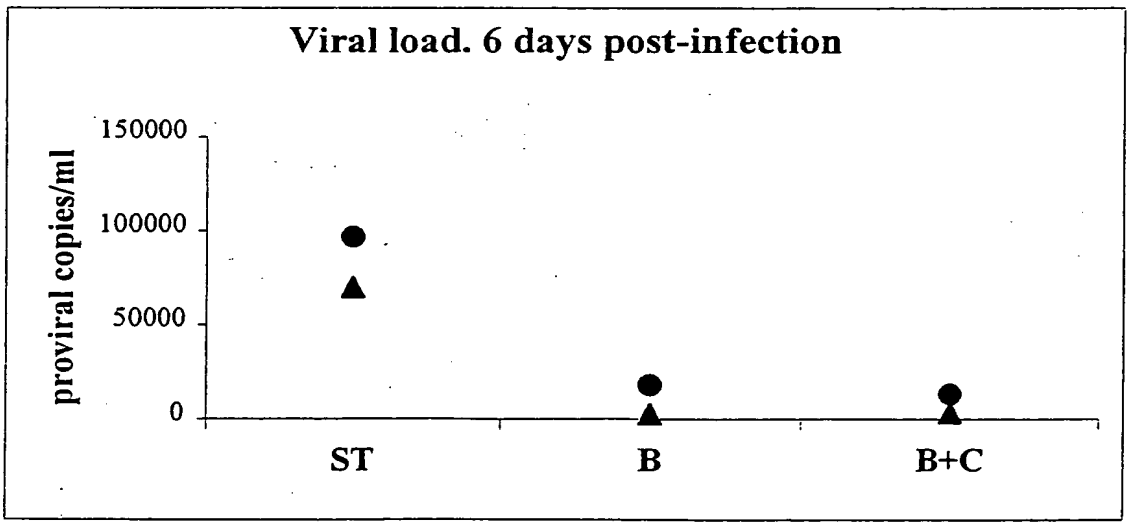


Figure 10. Inhibition of HIV replication in SCID-hu-PBL mice in the presence of selected oligosaccharides. B= globotriose; C=lactose; ST= untreated.

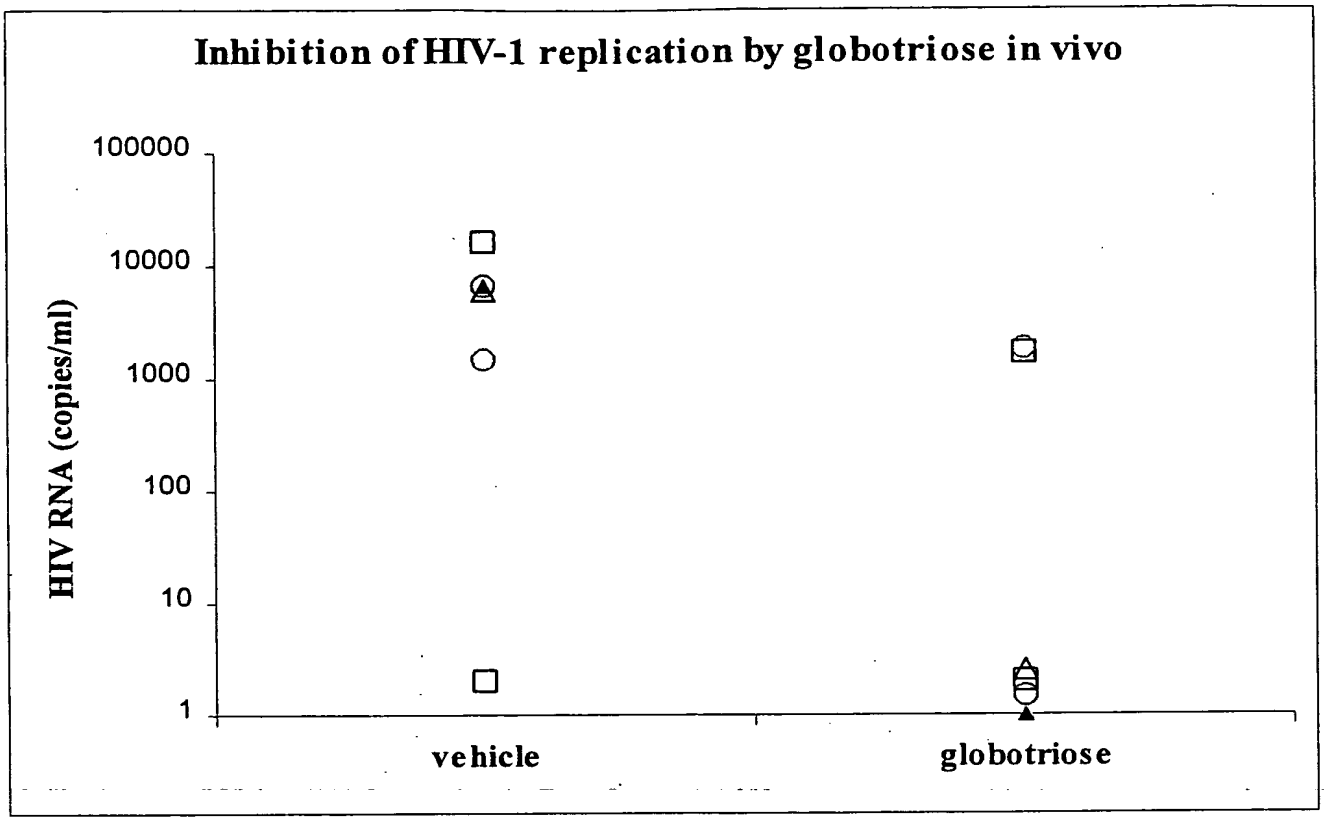


Figure 11. Inhibition of HIV replication in SCID-hu-PBL mice in the presence of globotriose *in vivo*.

Table I

Inhibition of HIV-1 replication by globotriose in the mouse SCID-huPBL model.

donor 1

mouse	treatment	p24 (pg/ml)	Viral load (copies/ml)
a	PBS	0	1000
b	globotriose	0	740
c	PBS	3	1280
d	globotriose	2	360

donor 2

mouse	treatment	p24 (pg/ml)	Viral load (copies/ml)
e	PBS	32	9400
f	globotriose	2	1200
g	PBS	3	0
h	globotriose	1	0

donor 3

mouse	treatment	p24 (pg/ml)	Viral load (copies/ml)
i	PBS	12	10300
j	globotriose	8	8390
k	PBS	19	2400
l	globotriose	13	3700

PBMC isolated from three normal human donors (1-3) were injected separately i.p. into the indicated NOD/SCID mice ($30x10^6$ cells/mouse). Mice a,b,e,f,i and j were male;whereas mice c, d, g, h, k and l were female. Fifteen days later, mice were inoculated with $1x10^6$ T lymphoblasts infected 1-day earlier with HIV-1 (strain NL4.3) at a multiplicity of infection of 0.5. A single dose of 15 mg globotriose in 1 ml PBS was administered i.p. immediately after inoculation of the infected cells (globotriose group) or PBS alone (PBS group). Mice were euthanised at day 6 after infection and the concentration of viral antigen as well as viral load was measured from the peritoneal exudate.